

Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/US05/001200

International filing date: 18 January 2005 (18.01.2005)

Document type: Certified copy of priority document

Document details: Country/Office: US
Number: 60/536,838
Filing date: 16 January 2004 (16.01.2004)

Date of receipt at the International Bureau: 18 February 2005 (18.02.2005)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



World Intellectual Property Organization (WIPO) - Geneva, Switzerland
Organisation Mondiale de la Propriété Intellectuelle (OMPI) - Genève, Suisse

1267854

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

February 08, 2005

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE.

APPLICATION NUMBER: 60/536,838

FILING DATE: January 16, 2004

RELATED PCT APPLICATION NUMBER: PCT/US05/01200



Certified by

Don W. Duckas

Under Secretary of Commerce
for Intellectual Property
and Director of the United States
Patent and Trademark Office



011604

16711 U.S. PTO

PTO/SB/16 (01-04)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No.

19587 U.S. PTO

60/536838



011604

INVENTOR(S)					
Given Name (first and middle (if any))		Family Name or Surname		Residence (City and either State or Foreign Country)	
William M.		HEYN		Norwalk CT 06854	
Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (500 characters max)					
ANGLED SEALING SURFACE AND METHOD OF MANUFACTURE					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input checked="" type="checkbox"/> Customer Number:		<div style="border: 1px solid black; padding: 2px 20px; text-align: center;">25628</div>			
OR					
<input type="checkbox"/> Firm or Individual Name					
Address					
Address					
City		State		Zip	
Country		Telephone		Fax	
ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages <u>3</u>		<input type="checkbox"/> CD(s), Number _____			
<input type="checkbox"/> Drawing(s) Number of Sheets _____		<input type="checkbox"/> Other (specify) _____			
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76					
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT					
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.		FILING FEE Amount (\$) <div style="border: 1px solid black; padding: 10px; width: 100px; margin: 0 auto;">\$80.00</div>			
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees.					
<input checked="" type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: <u>082670</u>					
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

[Page 1 of 2]

Respectfully submitted,

SIGNATURE

*William H. Holt*TYPED or PRINTED NAME William H. HoltTELEPHONE 703 838 2700Date January 16, 2004REGISTRATION NO. 20,766

(if appropriate)

Docket Number: Heyn - P1**USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT**

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PROVISIONAL APPLICATION COVER SHEET
Additional Page

PTO/SB/16 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Docket Number

INVENTOR(S)/APPLICANT(S)		
Given Name (first and middle (if any))	Family or Surname	Residence (City and either State or Foreign Country)

[Page 2 of 2]

Number _____ of _____

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

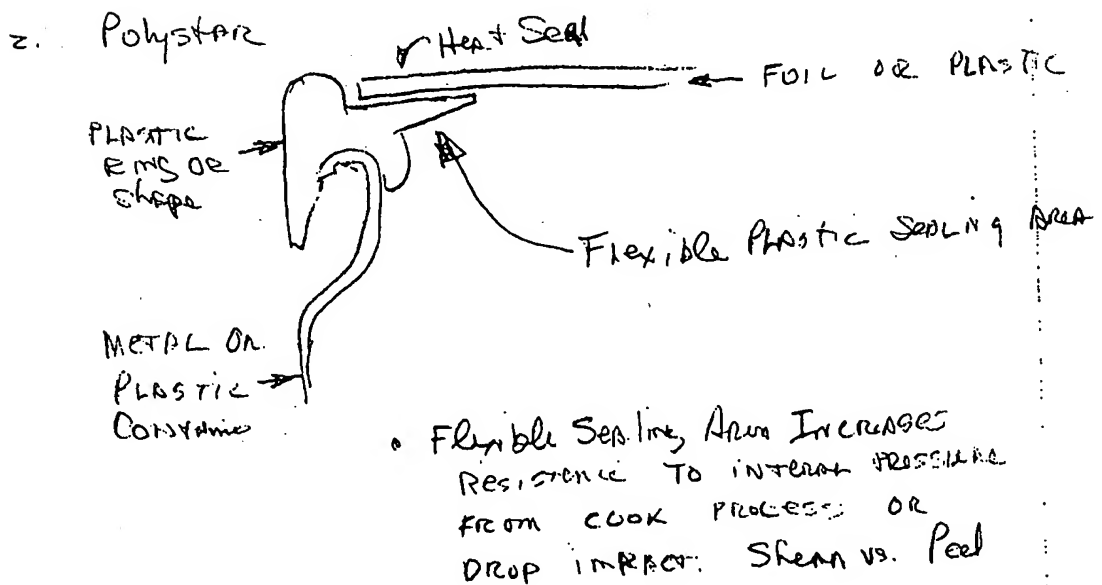
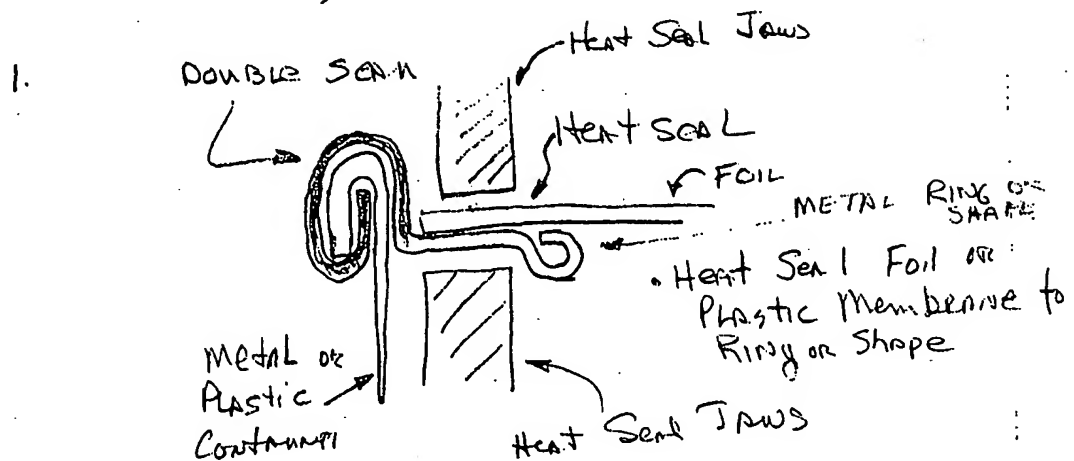
TITLE: ANGLED SEALING SURFACE NEW METHOD OF MANUFACTURE

William M. Hearn

PAGE 1/3

BEST AVAILABLE COPY

Current Technology:



Invention Aetial.

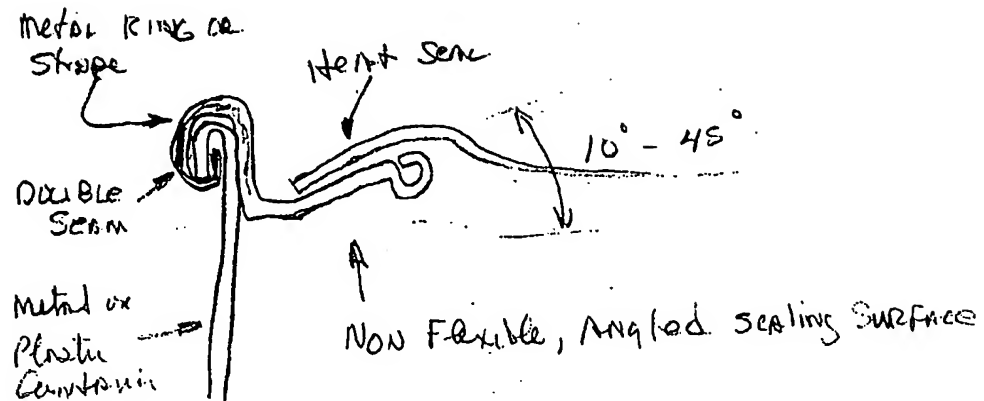
3. IF Metal RING OR SHAPE IS A REQUIREMENT, A NON HORIZONTAL SEALING SURFACE WOULD INCREASE RESISTANCE TO INTERNAL PRESSURE.

Therefore, FORMING A ANGLED SEALING SURFACE, IN METAL WHICH IS NOT FLEXIBLE, WOULD INCREASE BUILT UP

BEST AVAILABLE COPY

ARTICAL

Page 2/3



TEST RESULTS: FLAT SEAL SURFACE VS ANGLED 25°

Test #	Descript	Burst (PSI)
1	FLAT	22
2	"	23
3	"	22
4	"	22
5	"	24
6	"	22
7	"	23
	Ave	22.8
8	ANGLED	47
9	"	41
10	"	43
11	"	47
12	"	47
13	"	48
14	"	45
	Ave	45.7

25° ANGLED YIELDED 100% INCREASE IN BURST PSI

Invention Method:

IF HEAT SEAL WAS ATTEMPTED ON ANGLED SEALING AREA, FOIL WOULD WRINKLE CAUSING POTENTIAL LEAKS OR REDUCED STRENGTH.

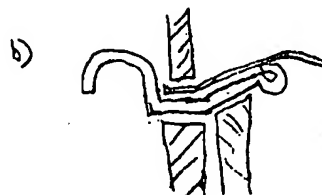
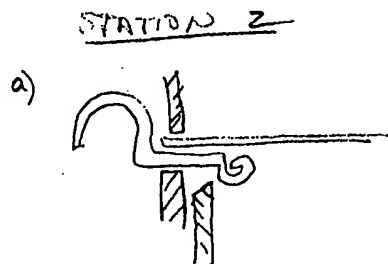
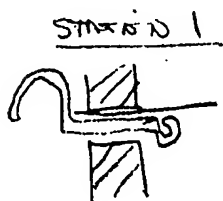
THEREFORE:

- 1.) Heat Seal must be accomplished in the FLAT AND REFORMED
- 2.) THE FOIL MUST BE CLAMPED COINCIDENTALLY OR PRIOR TO REFORMING TO AVOID REFORMING THE SEAL

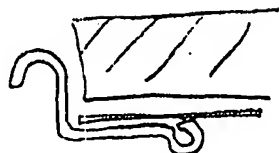
THIS CAN BE ACCOMPLISHED IN PROGRESSIVE STATIONS ON THE HOT MANUFACTURING LINE.

STATION 1 HEAT SEAL

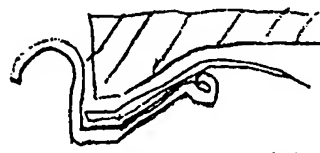
STATION 2 CLAMP FOIL AND REFORM



Seaming Chuck:



NORMAL CHUCK



RELIEVED CHUCK

CHUCK MUST BE RELIEVED 360° TO AVOID CRUSHING THE REFORMED SECTION